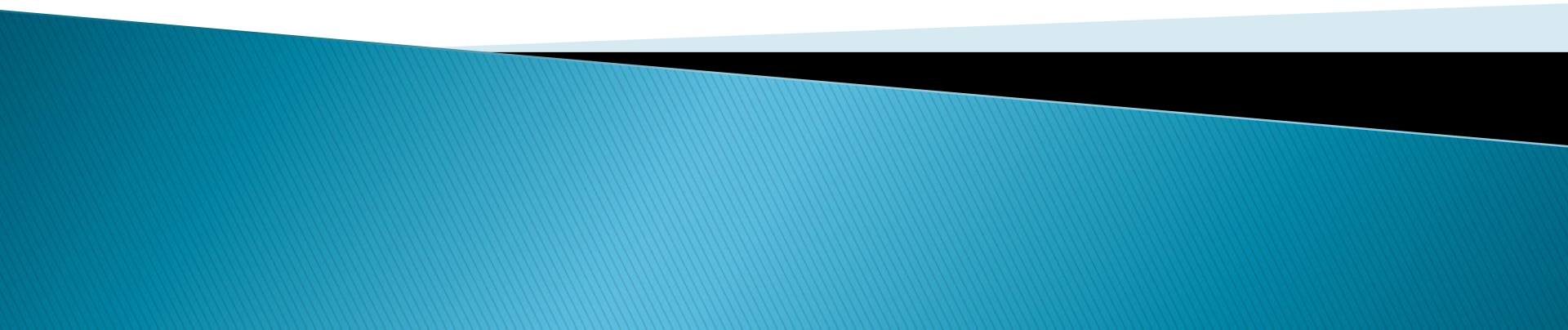
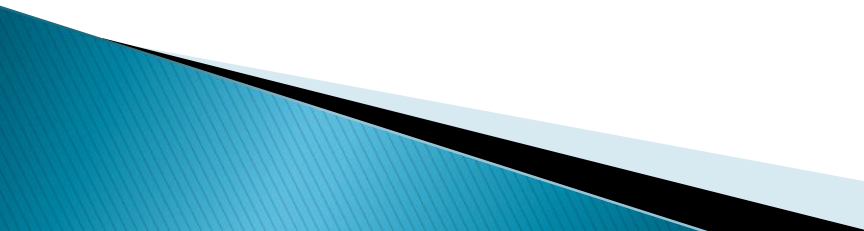


The Federal Reserve System



The Federal Reserve System

- ▶ Prior to 1913, hundreds of national banks in the U.S. could print as much paper money as they wanted
 - ▶ They could lend a lot of money to borrowers when times were good
 - ▶ And refuse to lend money when times were bad
 - ▶ Bankers earned big profits, they were often a disaster for the economy as a whole
- 

The Federal Reserve System

- ▶ That is why the Federal Reserve System (often called “the Fed”) was established
- ▶ Established in 1913, its main job is to set monetary policy
 - To regulate the amount of money available in the economy
 - Promote economic growth
 - full employment
 - to limit the impact of inflation and recessions

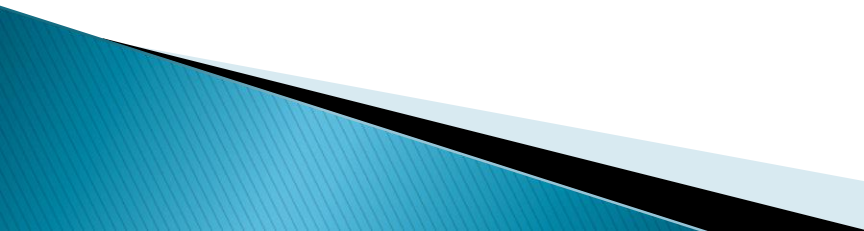
The Federal Reserve System

- ▶ Another important job of Fed:
 - To make and enforce rules about what banks can and cannot do
 - What percentage of a bank's deposits must be held as **reserves** (cash available for withdrawals, rather than being invested)
 - Many bank's reserves are held by the Fed itself and transferred to individual banks as needed


The Federal Reserve System

- ▶ Often called the nation's "central bank"
- ▶ It is actually a system of twelve different banks in different regions of the nation
- ▶ Each bank prints paper currency (money) called Federal Reserve Notes
- ▶ The Federal Reserve System is run by a Board of Governors
 - Appointed by the U.S. president
- ▶ Monetary policy of the Fed is decided by a group called the Federal Open Market Committee (FOMC)


How and Why the Fed Regulates the Money Supply

- ▶ FOMC regulates the money supply by buying and selling government **securities (bonds)**
 - ▶ This process is called “Open–Market Operations”
 - ▶ Bond – a document issued by the government for which you pay a certain price now, in exchange for a higher fixed amount, called the *face value*, later
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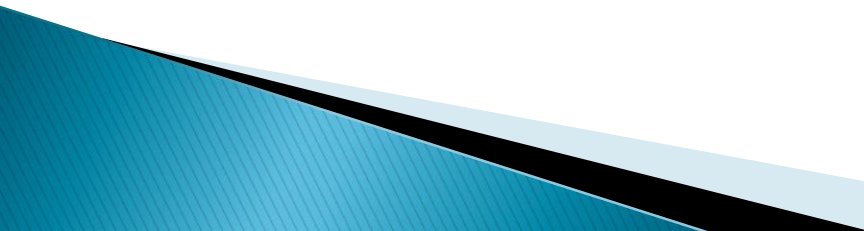
How and Why the Fed Regulates the Money Supply

- ▶ A bond usually “matures” or pays its face value in 5, 10, or 20 years
 - ▶ Microeconomic example: You might buy a \$25 savings bond for \$18 today and be able to redeem it years later for \$25, when it matures to its face value
 - ▶ Key Fact about bonds: They don’t pay a fixed interest rate
 - The Less you pay for bond right now, the higher the interest rate you will earn when bond matures to its face value
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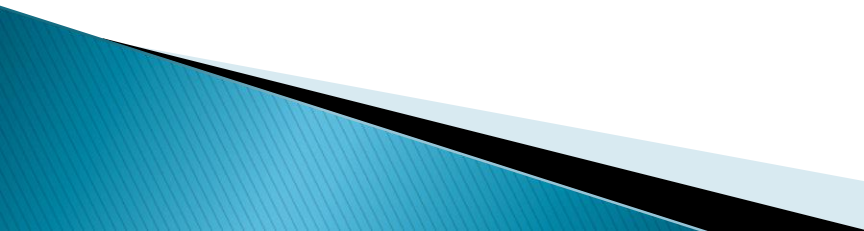
How and Why the Fed Regulates the Money Supply

- ▶ When economy in recession: Fed will buy bonds, or securities itself
 - The money it pays for the bonds goes into the banking system, so it increases the money supply
 - When banks have more money to lend, they lower interest rates
 - As a result, consumers will borrow more money to buy cars and houses
 - Businesses will borrow more money to make capital investments
 - The increases in consumer spending and business investment increase the GDP = Economic Growth
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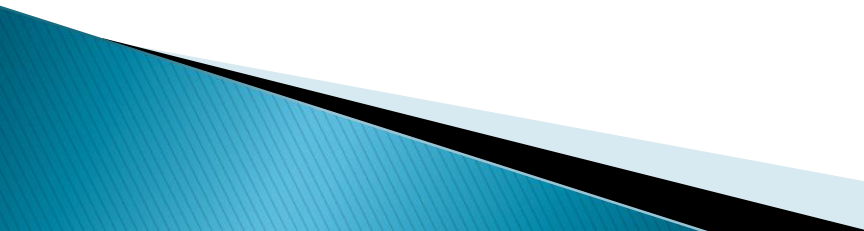
How and Why the Fed Regulates the Money Supply

- ▶ Sometime, though, the problem is that the economy is growing too fast.
 - People are spending too much money
 - And this drives up the demand for goods and services
 - This causes prices to rise too fast
 - ▶ If the economy is growing too fast, the Fed will sell bonds
 - ▶ The money paid to the Fed for bonds is taken out of circulation (decreasing the money supply)
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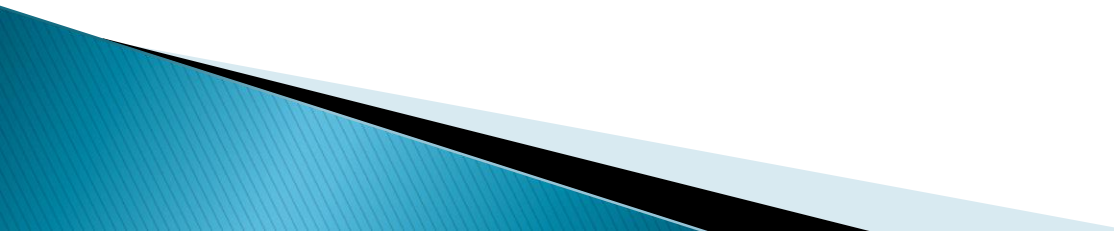
How and Why the Fed Regulates the Money Supply

- ▶ When the Fed buys bonds, the money supply is decreased
 - ▶ When money is in short supply, banks raise interest rates because so many consumers are competing for the limited funds
 - ▶ This means that fewer consumers can borrow money to buy cars, houses, etc. and GDP is reduced
 - ▶ This slows down economic growth and reduces the risk of inflation
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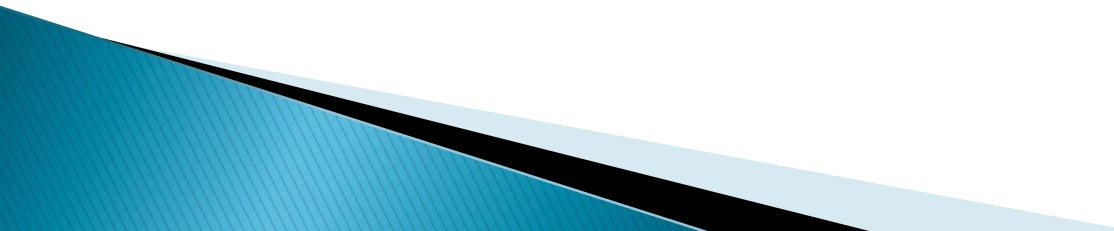
How and Why the Fed Regulates the Money Supply

- ▶ Another way Fed regulates money the money supply:
 - **Discount rate**, the interest rate it charges other banks to lend them money.
 - The Fed lowers the discount rate to increase money supply
 - and raises the discount rate to decrease the money supply
 - ▶ These changes in interest rates are then passed on by the banks to consumers who take out loans
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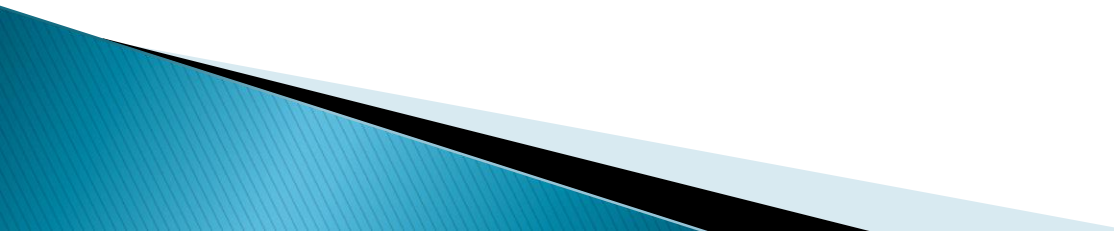
Fiscal Policy

- ▶ The Federal Reserve System is the Federal Government's Bank
 - ▶ Tax revenues are deposited into the Federal Reserve System
 - ▶ Government expenses are withdrawn from the Federal Reserve System
 - ▶ The Federal Government's **Fiscal Policy** is the kind of decisions it makes about taxing and spending in order to promote economic growth and stability.
- 

How and Why the Fed Regulates the Money Supply

- ▶ If the economy is facing a recession, for example, the government may decide to reduce income taxes
 - ▶ Because the government is then taking a smaller percentage of workers' paychecks, consumers can spend more
 - ▶ This increase in spending raises the GDP and can prevent a recession.
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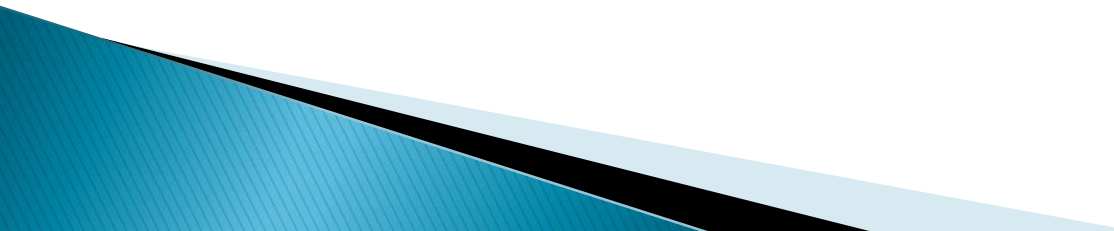
How and Why the Fed Regulates the Money Supply

- ▶ On the other hand, if the economy is growing too fast, the government might raise taxes to take money out of the economy and slow down consumption
 - ▶ Too much consumer demand causes shortage of resources
 - Which leads to higher prices and inflation
 - ▶ Slowing down consumer demand by raising taxes can prevent this inflation
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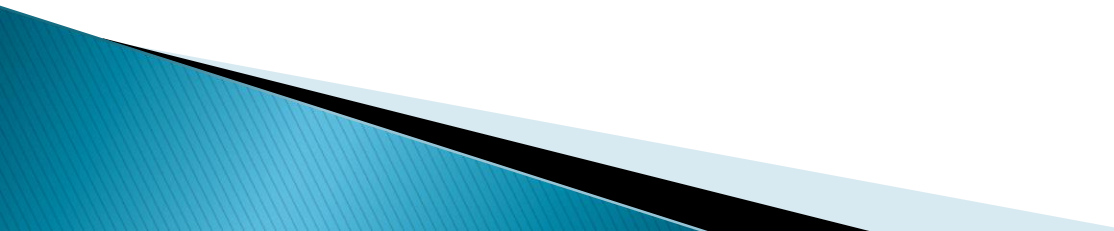
How and Why the Fed Regulates the Money Supply

- ▶ Since the $GDP = C + I + G + X_n$
 - The government can also regulate GDP by increasing or decreasing its own spending
- ▶ If the government cuts taxes and increases spending at the same time
 - the result could be a budget deficit
- ▶ This deficit spending does speed up economic growth, at least in the short term
- ▶ Every time the government has to borrow money to make up for a deficit, however, it increases the national debt

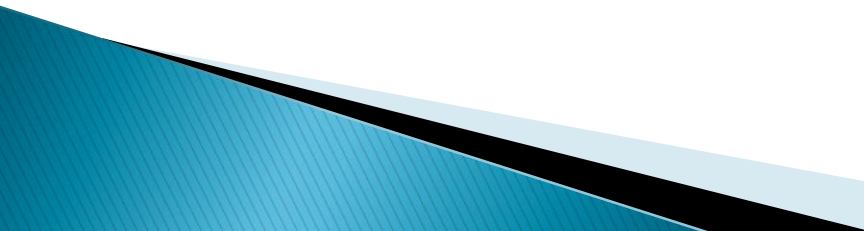
How and Why the Fed Regulates the Money Supply

- ▶ Interest payments on the national debt consume a lot of money the government collects in taxes
 - ▶ Government borrowing also increases interest rates for everyone else
 - Because this reduces the amount of money available to other borrowers (crowding-out-effect)
- 

How and Why the Fed Regulates the Money Supply

- ▶ Regulating the economy by fiscal policy is a complicated and sometimes self-defeating process
 - ▶ In recent past, the monetary policy of the Federal Reserve System has proven to be a fairly efficient tool to stabilize the economy
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Monetary Policy Tools

- ▶ **Open Market Operations** – Buying and selling bonds (used most often)
 - ▶ **Discount rate** – the rate the Fed charges banks to borrow money
 - ▶ **Reserve Requirement** – The percentage of checkable deposits the Fed requires banks to hold on deposit at the Fed (can either raise the reserve requirement to *contract* the money supply *or* lower the reserve requirement to *expand* the money supply).
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Question 1

- ▶ Which of the following is responsible for the monetary policy in the U.S.
 - A. Congress
 - B. the president
 - C. the Senate
 - D. The Federal Reserve